

DETAILED ACTION

Response to Amendment

1. Amendment filed 11/24/08 under 37 C.F.R. 1.116 has been entered in light of the amendments to the claims. Therefore, the Finality of the previous office action mailed July 3, 2008, has been withdrawn. Comments on Remarks filed with said Amendment are included below under "Response to Arguments". The following objections are recognized by attorney (cf. Interview Summary) as appearing to be minor informalities; however, applicant will be given an opportunity to respond to the objections, which are as follows:

Claim Objections

2. **Claims 3, 16 and 29** are objected to because of the following informalities: the wording " $0 \leq K$ " should be replaced by " $0 \leq k$ ". Appropriate correction is required.
3. **Claim 11** is objected to because of the following informality: "claim 10" (line 1) should be replaced by "claim 1".
4. **Claims 13, 26 and 39** are objected to because of the following informalities: the wording spanning lines 5 and 6 as follows: " $2\text{SrO}-0.84\text{P}_2\text{O}_{5-0.16}\text{B}_2\text{O}_3:\text{Eu}^{2+}$ " should be removed. Appropriate correction is required.
5. **Claim 13** is objected to because of the following informalities: the very last phosphor in the recited list, i.e., $(\text{Ba},\text{Sr},\text{Ca})\text{Si}_y\text{N}_z:\text{Eu}^{2+}$, should be preceded by the word "and". Appropriate correction is required.
6. **Claim 26** is objected to because of the following informalities: the wording "claim 21" (line 1) should be replaced by: "claim 25". Appropriate correction is required.

Response to Arguments

7. Applicant's arguments, see Remarks filed 11/24/08 with respect to all rejections have been considered and are found persuasive in light of the amendments. Hence the finality of the previous office action has been withdrawn. Furthermore, with reference to the indications of allowable subject matter as set forth in the previous office action, only minor objections are being issued. Subject to compliance by applicant to the amendment necessary for their removal the remaining claims would be allowed.

N.B.: To rectify the record for an informality in the office action, as correctly noted in the heading by applicant, indeed the rejection of claims 1-3, 5-8, 12-16, 18-21, 25-26, 40, 43, 45 and 46 over Bokor was under 35 U.S.C. 102(b), as indicated in the ground for rejection and in conformity with the body of the rejection (both section 4), despite the erroneous heading (section 3).

Allowable Subject Matter

8. Subject to the aforementioned objections as set forth in sections 2-6, **claims 1-8, 11-21, 24-40, 43, 45 and 46** would be allowed. Within the context of the context of the inventions as recited in independent claims 1, 14, 27, 40 and 46, the phosphor as otherwise claimed, specifically comprising either the phosphor composition $\text{Sr}_{0.95}\text{Ba}_{0.025}\text{Eu}_{0.025}\text{SiO}_4$ or the phosphor composition $(\text{Sr}_{0.58}\text{Ca}_{0.36}\text{Eu}_{0.06})_2\text{SiO}_4$ (with disclosure as preferred compositions (see page 8, line 32 – page 9, line 1, and Figure 5 and 6a,b; page 13, l. 8-11) has not been found nor is said phosphor obvious over the

prior art. In this regard it is noted that the two phosphor compositions are disclosed to excel in UV absorption and luminosity and color point (page 12, l.39-42 and page 13, l. 5-11). Given that the number of possible phosphors within the family (Sr,Ba,Eu)SiO₄ or the family Sr,Ca,Eu)SiO₄ within the stated precision of the stoichiometric parameters, i.e., two significant numbers, is 10,000, neither of the aforementioned two phosphor compositions within their respective 10,000 possibilities would have been obvious to try.

Conclusion

9. This application is in condition for allowance except for the following formal matters:

See objections to the claims, as set forth in sections 2-6, and as discussed with Applicant's representative. See Interview Summary enclosed with this action.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHANNES P. MONDT whose telephone number is (571)272-1919. The examiner can normally be reached on 7:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Johannes P Mondt/
Primary Examiner, Art Unit 3663